## "HANDLE WITH CARE!"

## How to Treat Your Seedlings

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here is an old saying that you don't win or lose a baseball game in the first inning, it takes playing all nine. Not so with planting trees. You can "win or lose" your future forest before you ever get the trees in the ground if you don't take some very important precautions in the first inning. Proper care of your seedlings during transportation and storage prior to planting is one of the most important factors in ensuring seeding survival.

Seedlings are PERISHABLE. That is worth repeating. Seedlings are PERISHABLE. Just like the eggs, milk, or meat you bring home from the grocery store, seedlings must be maintained in a controlled environment to stay fresh until planting. If mishandled during transportation and storage they can spoil and die.

In Alabama, planting season for bareroot seedlings begins in December and lasts through March. This is when trees are in their dormant state. Dormancy is when the growth of the seedling slows down and the bud of the seedling is hardened. Seedlings can handle the process of transplanting from the nursery to the forest since there is very little growth activity. Although seedlings are in an inactive growth state, precautions still need to be taken to ensure their survival.

Below are a few important rules to follow when transporting seedlings:

- 1. Order your seedlings from a nursery within 1-2 hours of the planting site or from a nursery that can provide refrigerated delivery to a point within 1-2 hours of the planting site. The Alabama Forestry Commission (AFC) transports seedlings in a refrigerated truck to satellite coolers across the state where they are stored until picked up by landowners.
- **2**. **Arrange** for your seedlings to be delivered as close as possible to the date planting will actually begin.
- **3. Inspect** all seedling packages for holes or tears and repair them immedi-

ately to keep air from entering the packaging and drying out the seedlings.

**4.** Use a consultant/vendor who has refrigerated transportation and storage abilities

If you are forced to deal with unrefrigerated transportation and storage, remember these important points:

- When hauling seedlings in an open bed truck, use a tarpaulin to cover them. Sufficient air space should be left between the top of the seedlings and the tarpaulin so that air can circulate and reduce heat buildup.
- Never transport trees in a vehicle that contains fertilizer, chemicals, or other fuel residues. Make sure the exhaust system of the vehicle is working properly and is not discharging heat onto the seedlings.
- Seedlings should be kept in the shade to limit sun exposure and reduce the chance of heat buildup.
- Unload and properly store seedlings as soon as the destination is reached.
- Seedlings should be stored in a protected area such as a shed to avoid freezing, wind, and heat buildup. The area should not be subject to overheating or direct sunlight.
- Never stack seedlings more than two bundles high and use spacers to provide sufficient air space between stacks of bundles to reduce heat buildup.
- Periodically roll bundles containing seedlings whose roots have been coated with moisture retentive material to allow gel to redistribute evenly among seedling roots.
- ✓ Seedlings should be planted as soon as possible; within 2-3 weeks if storage temperatures range from 38-50 degrees F; or within 3-5 days if storage temperatures range from 50-70 degrees F.

Aside from handling, other important factors to consider include purchasing genetically improved seedlings from a reputable nursery. The AFC's Hauss Nursery in Atmore has been growing genetically improved seedlings for many years. When purchasing trees, the location of the planting site must also be considered. A professional forester can give you valuable information on site conditions and proper tree selection. The Commission grows bareroot pine seedlings for both piedmont and coastal areas.

Whether planting four acres or four hundred, planting trees can be an investment of your money and your time. You might purchase the best nursery stock available, but unless the seedlings are handled properly before planting you could lose your investment today, as well as your returns years from now.

For more information on tree planting and tree care or for any other question you may have about forestry, contact your local Alabama Forestry Commission County office.

If you would like to read additional articles about proper tree planting, you may want to refer to the following articles in previous *Alabama's TREASURED Forests*: Fall 1996 - page 26, Winter 1994 - page 8, Fall 1989 - page 27, or Winter 1988 - page 21.

## Never plant seedlings that:

- Have a sour smell. This is due to heat buildup and fermentation.
- · Have yellow needles.
- Are warm to the touch.
- The bark slips off easily, especially on the roots.
- The cambium layer is yellow to brown.
- Are molded.